



Contract No: TREN/07/FP6EN/S07.68923/038659 HIGH-COMBI

HIGH-COMBI

**HIGH SOLAR FRACTION HEATING AND COOLING SYSTEMS
WITH COMBINATION OF INNOVATIVE COMPONENTS AND
METHODS**

www.highcombi.eu

Instrument: STREP
Thematic Priority: Sustainable Energy Systems

Workpackage WP 6, Deliverable D23

"Romanian Workshop Report"

Due Date: December 2011 (Month 55)
Submission Date: November (Month 54)

Start date of project: June 1st, 2007
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Lead contractor for this deliverable:
Centre for Renewable Energy Sources and Saving (CRES)

Project co-funded by the European Commission within the Sixth Framework Programme (2002-2006)		
Dissemination Level		
PU	Public	X
PP	Restricted to other programme participants (including the Commission)	
RE	Restricted to a group specified by the consortium (including the Commission)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

**Current Status of Solar Heating and Cooling Technology /
Stadiul actual al tehnologiei de răcire și încălzire cu energie
solară**

Oradea, Romania / 18.11.2011

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1. WORKSHOP TABLE FACT SHEET

Event type	Workshop		
Event title	Current Status of Solar Heating and Cooling Technology		
Date	18.11.2011	Time	10.00 – 14.00
Event organisers	University of Oradea		
Address	Faculty of Civil Engineering and Architecture, Room A0		
City	Oradea	Country	Romania
No. Attendees	40		

2. OVERVIEW - MAIN OBJECTIVES OF THE EVENT

The Romanian National Workshop on Solar Heating and Cooling Systems, held in the frame of High Combi project, took place in Oradea, on November 18th, 2011. The Workshop has been organised by the Faculty of Energy Engineering in collaboration with the Faculty of Civil Engineering and Architecture.

The aim of the Workshop was to inform the participants about the advances in the technologies of using solar energy for both cooling and heating, as resulted from the research and development activities carried out during the HIGH-COMBI project. The target group comprised students and staff from the two faculties that organised the Workshop, but mainly the civil engineering and installations design companies, architects, large public buildings technical managers, and building inspectors. Therefore, invitations have been sent to more than 50 potentially interested persons from about 30 entities.

3. DESCRIPTION OF THE EVENT

Codruta Bendea was the main speaker at the Workshop, assisted by Marcel Rosca whenever needed. The PowerPoint presentations had been split into 6 sets containing a total of 110 slides.

The Workshop started with a rather brief presentation of the HIGH COMBI project (partners, budget, general concept, main objectives and expected results).

The main part of the Workshop consisted of presenting details on each demo site: building characteristics, conceptual technical design of the heating and cooling system, modelling and simulation, expected performance according to the model, monitoring results and model validation (where available).

4. ATTENDEES PROFILE

A rather low number of invited specialists from entities other than University of Oradea actually attended the Workshop. A large part of the attendees consisted of students from different bachelor and master study programs, as well as teaching and research staff from the Faculty of Civil Engineering and Architecture (most of them also working part time for engineering and design companies).

The list of participants is included in the Annex, together with some pictures from the event.

5. EVALUATION OF THE EVENT

The participants appreciated the global quality of the presentations, the information received on the concept of high solar fraction cooling and heating systems and technology currently available on the market (not known before) being of high interest for them, as obvious from the many questions asked during the entire duration of the Workshop.

A long and interesting discussion was carried out on the energy efficiency and economic feasibility of medium term and seasonal heat storage, including the concept of combining it with a ground source heat pump starting from the presentation of the Greek demo site.

The participants received the project web site address and the e-mail addresses of Codruta Bendea and Marcel Rosca for any additional information they might like to have in the future, and will receive a copy of the HIGH-COMBI Maxi Brochure when it will be available.

6. CONCLUSIONS

The Workshop lasted slightly longer than planned due to questions and long discussions on the presented technical topics, which demonstrates that the participants were really interested..

An important suggestion made at the end of the Workshop was to have a session on energy engineering of buildings during the Annual Conferences organised by the Departments of Energy Engineering and of Civil Engineering, or even to have a session on this topic jointly organised by the two Departments. A common decision was taken to initiate the procedure to start a Master Degree study program on Energy Engineering for Buildings as soon as possible, hopefully by the next academic year.

ANNEXES



